

FINAL PERFORMANCE REPORT

USDA AMS AGREEMENT NUMBER 12-25-B-1220 (2011-FB)

DEPARTMENT OF AGRICULTURE OF PR

STATE PLAN 2011

***PROJECTS TO ENHANCE THE COMPETITIVENESS OF PUERTO RICO
SPECIALTY CROPS THROUGH A STATE BUY-LOCAL PROMOTION
AND MARKETING PLAN FOR LOCAL PRODUCERS, BEST
PRACTICES CAPACITY-BUILDING FOR PRODUCERS, FARMERS'
MARKET PROMOTION PROJECT AND VARIOUS RECOMMENDED
SUB GRANTEE PROJECTS***

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DESCRIPTION OF APPROVED GRANT

This is the final report for Specialty Crops Block Grant under Agreement 12-25-B-1220. The grant amount was \$375,525. The grant period begun on October 1, 2011 and ended on September 29, 2014. This report covers activities and expenses during the last year from October 2013 to September 2014. As a part of the present agreement, the Puerto Rico State Plan included a Sub Grantee project component. The main and sub grantee projects and the allotted budgets for each are included in the following tables:

MAIN PROJECTS, AS APPROVED

Continuity to State Managed Projects
Sub Grantee Projects

SUB GRANTEE PROJECTS APPROVED

<i>Offecay, Inc.</i>
<i>La Tierra Prometida, Inc.*</i>
<i>Municipio de Guaynabo*</i>
<i>Núcleo de Apicultores de PR*</i>
<i>Hidrocultivos Carolinenses, Inc.</i>
<i>Organización Boricuá de Agricultura Eco Orgánica, Inc.</i>
<i>Cali Nurseries, Inc.*</i>

*Projects were completed and/or not executed, as per informed in previous 2nd annual report.

In the next pages, please find the following reports of each state managed and sub grantees projects:

STATE MANAGED PROJECT (1)

PROJECT TITLE: Local and International Promotional Activities: Promotion for Buy Local Sub branding Program and for International Sales of Puerto Rico Products

PARTNER ORGANIZATION: FIDA

PROJECT SUMMARY: With this project FIDA provided a framework that provided the setting for collective, shared promotional activities and programs that being of assistance in the marketing aspect to specialty crop producers in general. The main objective was to provide opportunities that were enjoyed in a collective manner by local specialty crops producers. This allowed local products to enhance their competitiveness simply by improving the capacity of consumers to recognize the local agricultural specialty crops producers at the sales points. The project gave continuity to previous efforts utilizing SCBGP funds, of achieving better recognition of local produce that were made under *Delpaís* as a principal brand. While *Delpaís* brand continued to be used by firms that previously had been licensed to package all or part of their production, the priority was assigned to the *100% Cosecha de PR* sub brand, based on a seal that was added alongside multiple and various brands with the intention of giving the public a clear message that the packaged product that carried the sub brand was of local origin.

PROJECT PURPOSE: The identification of produce as “locally produced” has been the main issue addressed through this project. The identification had to be worked from both ends: from the producer/packager (through recognizable labeling) and from the consumer end (through the capacity to recognize the communications signals). Among the general consumer public there existed a latent, measurable support toward local production for several reasons: perception of freshness and quality; desire to provide support of local economy; traditional sentiment including nostalgia related to childhood memories (previous generations were more focused in agriculture more than services and manufacture). Many consumers have indicated that they were willing to pay premium prices more for local produce to levels that may vary from one person to another. This allowed local products to enhance their competitiveness simply by improving the capacity of consumers to recognize them at the sales points.

PROJECT APPROACH: The utilization of funds for advertising the *100% Cosecha de PR* brand helped to achieve exposure of local specialty crop products (with or without the shared brand) in local and international trade shows. It was effective in creating opportunities for seller-buyer contact during the shows and thus providing further opportunities to make product available to the public and thus being able to compete. They got exposure of their products; some of them entered into the local and international market, which resulted in an increase of their sales. Not less important was that participating in these events, they made some business contacts that eventually could lead to future sales. The launching of the campaign and the coordination with services suppliers (magazine, TV, cooking shows and newspapers) was coordinated by a contracted service provider that reported directly to the Department of Agriculture's Secretary.

The manner in which FIDA assured the grants funds will solely enhance the competitiveness of specialty products was that funds were used to cover expenses of those producers firms of only specialty crop produce (fruits, vegetables and others eligible). Reimbursement of grant match was claimed in the cases where only the firms were eligible for SCBG. The procedure used for a grant reimbursement claim, to be clear, was that FIDA first paid the totality of expenses and later claimed reimbursement for eligible expenses.

The following Local & International Trade Shows were attended:

-MIDA 2014 (July 2014): A local event directed to the food industry. In this event the farmers begins negotiations which leads to finalized in businesses during the year. The following eight (8) agricultural firms participated in this event, with their respective products:

COMPANY NAME	PRODUCT
<i>Café Cibales</i>	Coffee
<i>Doña Tere</i>	Sofrito Traditional Condiment
<i>Apiarios Caraballo</i>	Honey
<i>Atenas Pineapple</i>	Fresh Pineapple
<i>Setas de Puerto Rico</i>	Fresh Mushrooms
<i>AF Produce</i>	Fresh Produce
<i>Cítricos de la Montaña</i>	Fresh Citrus
<i>Hidrocultivos Carolinenses</i>	Hydroponics

-SCAA (April 2014): An international event directed to coffee producers, in order to promote and incentivize coffee sales from local PR producers. The following coffee producers and firms participated in this event:

COMPANY NAME	PRODUCT
<i>Café Don Ruíz</i>	Coffee
<i>Hacienda San Pedro</i>	Coffee
<i>Café Nativo</i>	Coffee
<i>Offecay</i>	Coffee

-Coffee and Chocolate Expo 2014 (September 2014): This event was open to the public in general, especially sales were directed to those coffee and chocolate consumers. The following agricultural firms participated in this event, with coffee and chocolate/cacao products:

PARTICIPANTS	PRODUCT
<i>Café Don Ruíz</i>	Coffee
<i>Café Aromas del Campo</i>	Coffee
<i>Bajari</i>	Chocolate/cacao
<i>Caferama</i>	Coffee
<i>Café Serrano</i>	Coffee
<i>Café Offecay</i>	Coffee
<i>Café Puya</i>	Coffee
<i>Café 1739</i>	Coffee
<i>Hacienda Horizontes</i>	Coffee

<i>Hacienda Monte Alto</i>	Coffee
<i>Hacienda Tres Angeles</i>	Coffee
<i>Café La Campana</i>	Coffee
<i>Jeanmarie Chocolat</i>	Chocolate/cacao
<i>Café 100% Boricua</i>	Coffee
<i>Café Oro</i>	Coffee
<i>Café Gran Batey</i>	Coffee
<i>Café Yaucono</i>	Coffee
<i>Café La Finca</i>	Coffee
<i>Sandra's Farms</i>	Coffee
<i>Gustos Coffee Co.</i>	Coffee
<i>Chocolate FORTEZA</i>	Chocolate/cacao
<i>Café Castañer Supremo</i>	Coffee
<i>Hacienda Pons</i>	Coffee
<i>Café Cibales</i>	Coffee

-Americas Food & Beverage (October 2013): This show provides a great opportunity for US companies to interact with retailers and food service buyers from the US and all of Latin America and the Caribbean.

COMPANY NAME	PRODUCT
<i>Sucesión Serrallés Second, Inc.</i>	Fresh Mango
<i>AF Produce</i>	Fresh Produce

-Caribbean Trade Mission 2014 (June 2014): Trade mission to the islands of St. Kitts, St. Maarten, St. Thomas, St. Lucia, and Barbados organized in collaboration with the Puerto Rico Trade Company.

COMPANY NAME	PRODUCT
<i>Atenas Pineapple</i>	Fresh Pineapple
<i>Setas de Puerto Rico</i>	Fresh Mushrooms
<i>Sucesión J. Serrallés Second</i>	Fresh Mango
<i>Apiarios Caraballo</i>	Honey
<i>AF Produce</i>	Fresh Produce

-ASORE 2014: A local event from the *Asociación de Restaurantes de PR* (Restaurants Association of PR). Local agricultural firms participated in this event, with their respective products.

-FERIA NACIONAL DEL VALLE DE LAJAS: A local event, in which some participants were:

COMPANY NAME	PRODUCT
<i>Finca Don Pupa</i>	Fresh Pineapple
<i>Quiero Coco</i>	Coconut
<i>Mavitín</i>	Mavi Beverage
<i>Apiarios Caraballo</i>	Honey
<i>Kivarek</i>	Ornamental
<i>Café del Alba</i>	Coffee

-FERIA AGRÍCOLA AGRÓPOLIS: A local event which offered an educational and agricultural platform, so the public in general could experience the importance of our local agriculture and the industry.

-CONVENCIÓN COLEGIO DE NUTRICIONISTAS Y DIETISTAS: A local event (Nutritionists and Dietitians Convention)

-Placita en Plaza: A local farmers market located at the major shopping mall in PR “Plaza Las Américas”: For the last three or four consecutive years, this farmer’s market has been developed and many farmers and/or agricultural firms have participated. It took place every weekend from Thursday to Sunday. Since it is located in the biggest shopping mall in the metropolitan area, the farmers and their products had a lot of exposure. This event has benefitted them in developing at the max their businesses, increase their sales and as well achieve new markets. **Some** of the specialty crops farmers and/or agricultural firms that participated in this farmer’s market during the last grant year were:

COMPANY NAME	PRODUCT
<i>Hacienda Román</i>	Fresh Produce
<i>Finca Carraquillo</i>	Fresh Produce
<i>La Finquita de Bebo</i>	Fresh Produce
<i>El Colmenar</i>	Honey
<i>Apiarios de Borinquen</i>	Honey
<i>Mavitin</i>	Mavi Beverage
<i>El Mavi</i>	Mavi Beverage
<i>Herencia Borincana</i>	Fruit Artisanal Sweets and Candies
<i>Shelly's Dairy Goat Farm</i>	Fruit Artisanal Sweets and Candies
<i>Mr. Piña</i>	Fresh Pineapple & Pineapple based beverage
<i>Los Frutos de Mi Tierra</i>	Fresh Produce
<i>Antojitos de Mangó</i>	Mango based cupcakes, marmalade, and other sweets
<i>Finca Don Pupa</i>	Fresh Pineapple, Pineapple based hot sauce & marmalade
<i>Doña Tere</i>	Sofrito Traditional Condiment
<i>Dulcería</i>	Fresh Produce based Artisanal Sweets, Candies, & Desserts
<i>A La Postre</i>	Fresh Produce based Artisanal Sweets, Candies, & Desserts
<i>Dulce El Casero</i>	Fresh Produce based Artisanal Sweets, Candies, & Desserts
<i>De Hojas</i>	Artisanal Herbal & Plant based soaps, lotions, & scrubs
<i>Essence For Life</i>	Artisanal Herbal & Aloe Vera based soaps
<i>La Frutera del País</i>	Fruit Traditional Snow Cones & Fresh Cut Fruit
<i>Lavender Innovations</i>	Lavender Plants & Lavender based products
<i>Jardinato</i>	Ornamental Plants
<i>Kivarek</i>	Ornamental Plants
<i>Santa Bárbara</i>	Ornamental Plants
<i>Kiero Coco</i>	Fresh Coconut & Coconut Water
<i>D'Manolo</i>	Pumpkin Muffins and Bread
<i>Genabi</i>	Fresh Produce based pastas & sauces
<i>Hidronagel</i>	Hydroponic Lettuces
<i>Hacienda Isabel</i>	Coffee
<i>Café Del Alba</i>	Coffee
<i>Café La Torre</i>	Coffee
<i>Aromas Del Campo</i>	Coffee
<i>Café Tres Picachos</i>	Coffee
<i>Café Cibales</i>	Coffee

GOALS AND OUTCOMES ACHIEVED: Through the participation in all local and international events, in which our local agricultural firms participated, goals and outcomes were achieved. Here are some examples of successful participation of some producers when attending the following events:

- **SCAA 2014:** *Café Don Ruiz* presented two products: green coffee and roasted coffee. They brought to the event samples of both products, and also gave away samples of strained and espresso coffee. The benefits from the participation in the event were that they started negotiations for sale their coffee with enterprises from North and South America, who showed interest in buying green and roasted coffee. In addition, they received emails from interested companies to buy their products for its quality and cup excellence. *Café Nativo* interacted and participated actively with prospected buyers of coffee at a world level, especially from the United States. They offered samples of their coffee products to different prospected buyers, in addition to inform about the Puerto Rican coffee: height, most common varieties of crops; coffee type classification and methods of elaboration. The information provided led to prospect buyers to request samples and shown interest in achieve sales agreements. *Hacienda San Pedro* exhibited their coffee products. There were a lot of persons who demonstrated interest in their coffee products, reason why they delivered some samples to those interested. As informed, they had a potential increase in quality coffee export sales of about 400 quintals. *Offecay* achieved some initial contacts with possible green coffee buyers, which could represent potential increase in export sales of mangos sales of about 1,000 quintals of special coffee. Some contacted companies were: Community Coffee, USA; DOrigen Coffee, Spain; Alchemy Fine Foods, USA; Rainforest Café, Israel; Caribbean Coffee Company, USA; The Coffee Bean, USA and Drupp, USA. They learned that there was lack of information about our local specialty coffee and its excellent quality, plus the right price. The awareness created in projected sales for the next year was in about 1,500 quintals, representing new market and business opportunities and international relations.
- **Commercial Mission to the Caribbean:** This commercial mission was coordinated with the *Compañía de Comercio y Exportación de Puerto Rico* (Commerce and Exportation Company of PR). Five (5) local agricultural firms participated with the purpose of achieve sales, export and identify business opportunities within the Caribbean. All of them agree that the islands with major business sales opportunities were St. Marteen, St. Thomas and St. Croix. Local firms were: (1) *Apiarios Caraballo* (honey) achieved business contacts with the following businesses: Mercants Market (St. Thomas); Le Grand Marché, U & Me Whole Sale and Bimaco Distributors (St. Marteen); Supreme Distributors, Distribution Inc., Frank B. Amstrong LTD and Paul Clarke Holdings (Barbados), and finally Belles Ruches in St. Lucia. (2) *AF Produce* (fresh produce) achieved business contacts with: Merchants Market (St. Thomas); Le Grand Marché, Sunny Foods and Bimaco Distributors (St. Marteen); Supreme Distributors, Masy Distributors, Inc., Grady Marketing, Inc. and Paul Clarke Holdings (Barbados); Winfresh (St. Lucia), and Angie's Garden and Skipa in St. Kitts. (3) *Sucesión Serrallés* (ornamentals and mangoes) achieved business opportunity in St. Thomas with center gardens, landscaping and hotels. In addition, they found a business opportunity for grass sales, palms and ornamental plants. Finally, for the mango sales they found a great business opportunity for export the fresh fruit. In Barbados they found sales opportunity for plugs plants and terminated plants in Peatmoss.

In St. Lucia the sales opportunity was for both plugs plants and terminated plants in Peatmoss. (4) *Atenas Pineapple* (pineapple) achieved business contacts with the following companies: Grady Marketing, Inc. and Paul Clarke Holdings (Barbados); Nevis Tourism Aut. (Nevis); Proper Care and Price Smart (St. Kitts); AC Global, Le Grand Marche, Pearl Studio; Me & U whole Sale; Bimaco Distributors and WE Corporate Solutions (St. Marteen).

- **Americas Food & Beverage 2013:** The main objective of attending this event was to promote the local agriculture and products; to identify opportunities for the local industry, and to achieve sales of fruits (coconut, mango) vegetables; honey and derivate products. Local firms that participated were: *Sucesión Serrallés Second, Inc. (Fresh Mango) and AF Produce (fresh produce)*. This event, celebrated in Miami FL is the most important show in the Caribbean area, in which there was participation from all around the world and its dynamic is one of direct sales. The Florida market is one of the most important for Puerto Rican companies in the food and beverage sector, due to the high concentration of hispanic population. The opportunities provided by this international fair helped to establish business relationships with major buyers, and thus promote the penetration of our international trade companies. The participating local firms achieved business opportunities within Florida, the Caribbean and Texas. Potential increase in export sales of mangos in short range were of more than \$200,000.00.

Finally, our proposed project established in the state plan was to achieve our target: to be able to integrate and/or adhered a total of sixty (60) specialty crop farmers/firms to the *100% Cosecha de PR* sub branding program (label and campaign). At the end of the grant period, we met our goal of adhere and/or integrate the firms to the *100% Cosecha de PR* sub branding program. A total of one hundred and twelve (112) specialty crop farmers/firms adhered and/or integrated to the sub brand. This total represents almost the double of expected firms to be impacted with the project.

BENEFICIARIES: Approximately 85 farmers and/or firms or producers were mainly the beneficiaries, which were impacted and were benefitted from local and international shows, as well as from the farmers market from this project. The list of the participating firms is described under the Project Activities section.

LESSONS LEARNED: The major lesson learned from the implementation of this project is the great exposure that the farmers and/or agricultural firms gained when participating in both local and international events. The participation of the local farmers and/or agricultural firms in all those local and trade shows, facilitated the promotion of their products and the increase of their sales. As an example, participation of specialty coffee firms in the SCAA event demonstrated that there is a negative perception regarding the local specialty coffee and its quality.

Their participation helped to inform the positive side of our quality specialty coffee; promote our coffee products, and establish business relationships within the local and the international industry. They also strengthened business relationships with other local and international farmers and agricultural enterprises, and finally market niches were identified in order for our farmers and agro businesses could obtain business opportunities. For example, during the Commercial Mission to the Caribbean, it was learned that currently the Caribbean works under a treaty that is known as CARICOM.

The following islands are under the treaty: Antigua; Barbuda; Bahamas; Barbados; Belice; Dominica; Grenada; Guyana; Haiti; Jamaica; Monserrate; St. Lucia; St. Kitts; Nevis; St. Vincent and Surinam. Under the treaty the islands could negotiate in free commerce. In the majority of the islands the taxes are approximately 40%. This will difficult the entry of our local products, and our local price competitiveness. It was also learned that, in case of the mango sales, there is a need to import processed product to make value added products. Nevertheless, local products have a great entry opportunity in islands like St. Thomas; St. Croix; Tortola and S. Marteen, since the islands does not have taxes or in any case there is a tax, it is very low.

The major source of income within all the islands is the tourism; and since the population is low, the floating population exceeds in many cases one million per island. Reason why the food consumption is huge, resulting in great opportunities for our local agriculture. From this event, also pending is a meeting with the Purchases Director from Royal Caribbean cruises. This will be a great opportunity to sold and supply the cruise ships with local products. For some special achievements that resulted from the participation of these firms in the local and international trade shows, please refer to the Goals and Outcomes Achieved section.

Regarding the local event "Placita en Plaza", the farmers market located at the biggest shopping mall, was and still being a successful event especially because it is very cost effective since the shopping mall administration does not charge for using the space. As a result of the recommendations stated in the last annual report by the staff (as lessons learned from local events of the project); the farmers market increased its presence from twice monthly, it was extended to every weekend. I addition, the farmers market was extended to another shopping mall, located in the second major city in PR: Plaza del Caribe Mall in Ponce. Actually, in order to give opportunity for other farmers to participate, participation of farmers were rotate every week. There are currently fifteen (15) local firms participating.

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ADDITIONAL INFORMATION: Attached you could see some *Placita en Plaza* pictures, related to this farmers market.

Pictures from “Placita en Plaza” (Farmers Market)



Picture from Americas Food and Beverage Show



STATE MANAGED PROJECT (2)

PROJECT TITLE: Advertising for Buy Local Branding Program

PARTNER ORGANIZATION: FIDA

PROJECT SUMMARY: This state managed project proposed to develop and implement an advertising campaign under the name *100% Cosecha y Crianza de PR* (100% Harvested and Raised in PR Products), in order to impress a buy local message in the public consciousness providing the tools for consumers to make decisions by being able identify local products at the point of purchase. Consumers then should been made aware of the existence of a collective local origin seal, that could identify local production while familiarizing the consumers with the seal thus increasing the recognition at the places of purchase. The project was within the scope of the branded buy local project described as part of state managed project 1, and related to it as one of the main activities.

This project built up and complemented work already done using prior SCBGP funds, to perform a market study through a survey in order to apply the knowledge obtained to consider the logo; the soundness of the hypotheses proposed regarding support for local products, and by prior funds assigned to production of advertising copy and for placement of advertising in commercial slots in media options, by pooling with such funds to allow a more intensive and extensive campaign.

PROJECT PURPOSE: The project proposed was based on providing local consumers with the means to identify and differentiate local specialty crops from those imported. The *100% Cosecha y Crianza de PR* sub brand was based on a seal that have been added alongside multiple brands, to give the public a direct and clear message that the packaged product identify with *100% Cosecha y Crianza de PR* brand was from local origin. In the case of the specialty crops, the seal used was only identified under the name *100% Cosecha de PR*. The advertising campaign promoted the purchase behavior as well as advertising the local origin seal. All advertising should promoted recognition and support for local solely eligible production as differentiated from imported products, that not contributed fully to PR's economy.

PROJECT APPROACH: Through the *100% Cosecha* brand the Department of Agriculture seeks to contribute increase the consuming and the demand of our local agriculture. The study or survey performed before the launching of the campaign, and called *Estudio de Hábitos de Consumo de Alimentos Frescos en los Hogares* (Study of Habits of Consumption of Fresh Food in Homes) revealed consuming habits of the public in favor of our local production. In addition, revealed that a principal advantage of local produce is the quality of freshness. Most important, it revealed that a 79% of the population surveyed considered very important the use of a seal of guarantee in fresh foods of PR. The brand was supported by a series of marketing efforts, which included a massive advertising campaign launched publicly. Activities related included media advertising campaign through tv ads, billboard ads, magazines and newspaper ads. In addition, the Department of Agriculture's fleet was labeled with the logo.

Most activities included in the Work Plan were performed. Outreach toward farmers was performed directly by our Regional offices, located around the island; plus by our FIDA staff within the Farmers Market's specialty crop participants. Beforehand, staff met with the Regional Directors in order to provide information regarding the project. In addition, announcement of funds available to assist farmers and producers in adhered to the brand was posted in the Department of Agriculture's website. Regarding media tour from the Secretary, there were some press releases reporting about some official activity the Secretary had, and in which information was provided to farmers and producers in those official activities that the Secretary had with them. Those press releases also were distributed within the different Agricultural Regional Offices.

In order to educate the consumers, the DAPR initiated an educational and promotional effort through the website and media. Through the *100% Cosecha*, the DAPR seek to contributed increase the consuming and the demand for our local agriculture. *100% Cosecha* was supported by a series of marketing efforts, which included an advertising campaign, promotional activities in supermarkets and other sales points; demonstrations and special events directed to promote sales of our agricultural products among our consumers. Policies for the use of the seal were established. Every farmer or producer that complied with quality criteria established by the DAPR and mainly that were produced locally, were the ones who qualified within the specialty crops definitions. Every farmer and producer which complied with the criteria, requested a certification and filled a form/application (*Solicitud de Certificación de 100% Cosecha de PR*).

For those who applied for the certification the DAPR sent an Inspector to visit the farm or the processing plant, in order to evaluate compliance with the quality criteria as part of the certification process. The inspection process for the certification had a cost of \$250, from which FIDA-DAPR incentivized the farmer or producer with \$175 to subscribe. At the end, the farmer or producer entered into a contract or collaborative agreement with FIDA/DAPR. Through this certification they were allowed to use the seal, and as a result the agricultural product's value should be elevated. This because the agricultural specialty crop products provided the consumer a security that the products obtained were produced 100% locally in PR.

Produced in PR gave them a sense of quality and that complied with freshness standards established by the DAPR. When utilizing the seal the product counted with the support of an ample and integrated marketing effort that helped to promote their sales. In addition, a massive advertising campaign was performed; the buy local program was launched publicly. Around one hundred seven farmers and producers adopted the buy local *100% Cosecha* symbol or seal in their specialty crop product's packages. The promotional activities performed during the grant period leaded to the recognition of the shared logo, promoted through several media advertising to develop consumers' capacity to identify local products at points of sales, and promoted the public's support for local production.

Advertising campaign and promotional activities were performed, as prior mentioned, through media advertising: TV, billboard, magazines and newspapers ads. In addition, the DAPR truck fleet was also labeled, and through the participation in both local and international trade shows; the packaging materials were redesigned and packaging materials production. The campaign had two phases: *Cosecha y Crianza*. It had three modes: *Cosecha y Crianza* (collectively); *Cosecha* (alone), and *Crianza* (alone). Specialty crop producers who were eligible under the SCBGP, labeled their eligible products under the *Cosecha* aspect. To the extent as possible, advertising for each of the phases (*Cosecha* at one hand and *Crianza* on the other) were managed separately from the other.

On some occasions the collective aspect was advertised. The way in which FIDA/DAPR ensured that grant funds were used solely to enhance the competitiveness of eligible products was by managing the investment in *Cosecha de PR* (where all products were eligible) separately as 50% of the total invested, and only requested reimbursement through grant funds for the 50% of that 50% share (25% of the total invested).

GOALS AND OUTCOMES ACHIEVED: The goals and objectives of this project were achieved. An increase sales volume of specialty crops agricultural products; promote the growth in specialty crops agricultural production; increase the opportunities for specialty crops agricultural products in distribution channels and point of sales; educate the public to consume *100% Cosecha de PR* specialty crop products, and to impact our agricultural economy. The goals and outcomes of this project were met. The advertising campaign promoted the purchase behavior, as well as advertising the local origin seal. All advertising should promoted recognition and support for local solely eligible production as differentiated from imported products, that not contributed fully to PR's economy. The identification and use of the seal provided confidence, warranty, quality, freshness and that the specialty crop products are from PR.

The *Estudio de Hábitos de Consumo de Alimentos Frescos en los Hogares* (Study of Habits of Consumption of Fresh Food in Homes) revealed consuming habits of the public in favor of our local production. In addition, revealed that a principal advantage of local produce is the quality of freshness. Most important, it revealed that a 79% of the population surveyed considered very important the use of a seal of guarantee in fresh foods of PR. The participation of producers in both local and international trade shows was an asset, since the local agricultural products were promoted in the trade shows. As a direct result, many firms and producers achieved businesses in and out of PR, as described in prior project. At least one hundred twelve (112) local farmers or producers participated, and were benefited from this project when adhered to the shared brand.

BENEFICIARIES: Through this project, many specialty crops farmers and/or producers were impacted and benefited from this project. Approximately one hundred twelve (112) local farmers or producers participated, and were benefited from this project when adhered to the shared brand. Most of them participated also in the promotional activities, including attending local or international trade shows. A list of the local and international events is described under the project Promotion for Buy Local Sub Branding Program for International Sales of PR Products.

LESSONS LEARNED: With the implementation of this project, we could learn that many producers have a real need of being adhered to the *100% Cosecha* brand. Being their agricultural products identified under a shared brand helped them to promote the public's support for their products. Through their participation, they achieved recognition of their products. In addition, we could create an effective communication and education mechanisms. We could conclude that the results from the study performed were validated. The study or survey performed before the launching of the campaign called *Estudio de Hábitos de Consumo de Alimentos Frescos en los Hogares* (Study of Habits of Consumption of Fresh Food in Homes) revealed consuming habits of the public, in favor of our local production. In addition, revealed that a principal advantage of local produce is the quality of freshness. Most important, it revealed that a 79% of the population surveyed considered very important the use of a seal of guarantee in fresh foods of PR. By the other hand, some producers did not adhere to the brand and /or use of the seal. They thought that adhering to the brand they could lost their identity. We concluded that there is a need in provide more education to the farmers and producers regarding this issue, in order to improve and increase their participation in a future similar project.

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ADDITIONAL INFORMATION:



STATE MANAGED PROJECT (3)

PROJECT TITLE: Best Practices Training and Food Safety Mentorship for Specialty Crop Producers

PARTNER ORGANIZATION: FIDA

PROJECT SUMMARY: The project's main activities of this project directed to offer trainings to specialty crops producers, related to food safety, best manufacturing processes and best agricultural practices. Those training sessions should facilitate the specialty crops farmers and producers, in order to integrate food safety practices, as well as to establish quality control in their operations. Same were coordinated and offered by the UPR Mayaguez Agricultural Sciences College Food Safety Institute of the Americas, leaded by very competent food science professionals. The project had two phases: one classroom situation in which best practices were discussed and impressed and, the second phase, a hands-on aspect where individualized mentorship was provided to firms that wished to establish their written programs and implemented them.

PROJECT PURPOSE: The purpose of this project was to increase awareness of food safety and best practices so as to improve quality and safety for the consumers, who are considered to be the principal beneficiaries of this improvement in quality. The trainings should lead ultimately to a more uniformed quality image for our local production. The project was considered important and timely since it was the proactive way that local producers could prevent the continued occurrence of food borne illness incidents that each day bears more risk of affecting the consumption of their products. In addition, we continued to see regulatory agencies (for example, USDA & FDA) take more strict postures and actions towards food safety issues. We perceived that many producers needed to enhance their consciousness and knowledge of food safety and quality and improved their practices during and after production, including when processing, to be able to make a quality claim that could maintain them competitive in the face of imported products. Having quality protocols became a requirement that principal clients pressed upon their suppliers firms, and in this manner quality and food safety trainings impacted access to points of sales to consumers.

PROJECT APPROACH: General activities performed under the project included: coordination and scheduling for training sessions; development of the enrollment for the courses; obtain assistance from Regional Directors; prepare list of participants; coordinate information with trainees about courses dates; carry out the training sessions; attend the sessions, and introduce mentors to trainees and notify availability for individualized mentorship. All those activities were performed by FIDA staff, along with the training service provider staff from UPR Mayaguez Agricultural Sciences College, Food Safety Institute of the Americas.

During the 3 year's grant period, approximately two hundred twenty three (223) participants were impacted and benefitted from the project during this year period. The training sessions that were offered are: Best Agricultural Practices and Post Harvest (4); Best Agricultural Practices during Distribution and Transport (2) and Food Quality/Safety (3).

GOALS AND OUTCOMES ACHIEVED: The project proposed to impact and benefit at least one hundred (100) farmers/producers and or firms. At the end of this project (during this grant period), 117 were benefited from the project; for a total of 223 during the whole 3 year period. This means that the project is well perceived and received, and that there is a real need to train the farmers and producers in such areas. All 223 eligible producers received certificates. Individualized food safety mentorship was given to approximately 73 producers, which completed written food safety protocols; achieving the target expected goal of 15 firms.

BENEFICIARIES: One hundred seventeen (117) specialty crop farmers/producers participated and benefitted from the courses offered through this project during this last year grant period; for a total of 223 during the whole 3 year period.

LESSONS LEARNED: The main lesson learned with the implementation of this project is that farmers and producers have a real need of been trained in areas such as Best Agricultural Practices; Best Manufacturing Practices; Best Practices during Distribution and Transport ; as well as in areas of food quality.

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STATE MANAGED PROJECT (4)

PROJECT TITLE: Farmers Market Promotion

PARTNER ORGANIZATION: FIDA

PROJECT SUMMARY: Under this project is included the extension of the project (grant funds approved through 2nd Request Amendment) to *Placita en Plaza del Caribe Ponce*. Since Puerto Rico does not qualify for AMS Farmer's Market Promotion Program, the State Agency felt the need to carry out the type of activities enabled under such grant program. We involved in the promotion of several farmers market initiatives aimed at increasing direct sales from farmers to consumers and promoting greater consumption of locally produced agricultural products. This provided a greater margin for producers, provided a healthy interaction between producers and consumers, making more obvious the need to maintain quality, so that the consumers stay satisfied, and provides access for small firms that were incapable of satisfying retailer requirements or who do not have sufficient volume to participate in regular market channels.

PROJECT PURPOSE: State Agency pursued the use of grant funds to promote farmers markets that could benefit specialty crop producers, by providing necessary market access and increased marginal income to be obtained through a direct sales situation. The specific use was to create promotional activities that could draw public to the markets and increase public knowledge of calendar, schedule and availability. The specific issue or need addressed through the project was the need that a specific group of farmers had for access to direct sales to the consumers to enhance their competitiveness. The need for access was felt by many producers, who were excluded from traditional retail outlets because of their small size and lack of capacity to deliver large quantities of merchandise consistently; and became disappointed at the prices that market intermediaries offer for their products when they visited the farms to purchase from the farmers. Consumers, on their part, were anxious to be able to buy fresh excellent quality produce directly from the farmers and made a connection with the production aspect of food supply chain for cultural and humanistic reasons.

PROJECT APPROACH: Farmers market located at *Plaza Las Américas*, is the main market of our project. The shopping mall is the biggest one in PR, in addition, is located in San Juan which is the capital main city in PR. The market has been celebrated since various years ago, and every year we tried to considerate new vendors to participate in the market. Most of them are farmers that are referred by the Regional Agricultural Offices from the Department of Agriculture. In addition, farmers who participated in other projects within the Department and that are eligible are also considered. When renegotiating the contract each year with the mall administration, farmers/vendors are actually evaluated. Then they continue to be evaluated in almost a monthly basis, since we need to know which of them are complying with the rules established and in addition, are been successful within the market and increasing their sales. Therefore, the vendors list was updated constantly. Since we have staff permanently in the market, the communication with the vendors and the attention given to them is constant. New vendors are oriented regarding the market's regulations once they are selected to be placed in the market.

-Placita en Plaza Las Américas: A local farmers market located at the major shopping mall in PR “Plaza Las Américas”: For the last three or four consecutive years, this farmer's market has been developed and many farmers and/or agricultural firms have participated. It took place every weekend from Thursday to Sunday. Since it is located in the biggest shopping mall in the metropolitan area, the farmers and their products had a lot of exposure. This event has benefitted them in developing at the max their businesses, increase their sales and as well achieve new markets. Firms that participated in this farmer's market during the last grant year reported estimated collective sales in \$1,150,000.00 approximately, compared to \$855,000.00 in sales for year 2012.

Some of the participant firms were:

COMPANY NAME	PRODUCT
<i>Hacienda Román</i>	Fresh Produce
<i>Finca Carraquillo</i>	Fresh Produce
<i>La Finquita de Bebo</i>	Fresh Produce
<i>El Colmenar</i>	Honey
<i>Apiarios de Borinquen</i>	Honey
<i>Mavitin</i>	Mavi Beverage
<i>El Mavi</i>	Mavi Beverage
<i>Herencia Borincana</i>	Fruit Artisanal Sweets and Candies
<i>Shelly's Dairy Goat Farm</i>	Fruit Artisanal Sweets and Candies
<i>Mr. Piña</i>	Fresh Pineapple & Pineapple based beverage
<i>Los Frutos de Mi Tierra</i>	Fresh Produce
<i>Antojitos de Mangó</i>	Mango based cupcakes, marmalade, and other sweets
<i>Finca Don Pupa</i>	Fresh Pineapple, Pineapple based hot sauce & marmalade
<i>Doña Tere</i>	Sofrito Traditional Condiment
<i>Dulcería</i>	Fresh Produce based Artisanal Sweets, Candies, & Desserts
<i>A La Postre</i>	Fresh Produce based Artisanal Sweets, Candies, & Desserts
<i>Dulce El Casero</i>	Fresh Produce based Artisanal Sweets, Candies, & Desserts
<i>De Hojas</i>	Artisanal Herbal & Plant based soaps, lotions, & scrubs
<i>Essence For Life</i>	Artisanal Herbal & Aloe Vera based soaps
<i>La Frutera del País</i>	Fruit Traditional Snow Cones & Fresh Cut Fruit
<i>Lavender Innovations</i>	Lavender Plants & Lavender based products
<i>Jardinato</i>	Ornamental Plants
<i>Kivarek</i>	Ornamental Plants
<i>Santa Bárbara</i>	Ornamental Plants
<i>Kiero Coco</i>	Fresh Coconut & Coconut Water
<i>D'Manolo</i>	Pumpkin Muffins and Bread
<i>Genabi</i>	Fresh Produce based pastas & sauces
<i>Hidronagel</i>	Hydroponic Lettuces
<i>Hacienda Isabel</i>	Coffee
<i>Café Del Alba</i>	Coffee
<i>Café La Torre</i>	Coffee
<i>Aromas Del Campo</i>	Coffee
<i>Café Tres Picachos</i>	Coffee
<i>Café Cibales</i>	Coffee

Farmers market located at *Plaza del Caribe* shopping mall, is actually the second biggest mall in PR, and also located in the second main city in PR (Ponce). The selection of farmers/vendors was similar to the *Plaza Las Américas* vendors. Processes established and regarding evaluation, selection and negotiation of contract was also similar, in addition that we also had staff there constantly to assist and orient them.

-Placita @ Plaza Del Caribe Mall in Ponce (June 20 through September 30, 2014): This market was established through an amendment to the grant, due to unused funds from others projects. Report of estimated sales: \$51,800.00 approximately. The initial and current sixteen (16) participants were:

COMPANY NAME	PRODUCT
<i>Café Teto</i>	Coffee
<i>Café Tres Angeles</i>	Coffee
<i>Dulces Típicos</i>	Artisanal Sweets and Candies
<i>Sofrito de Mary</i>	Sofrito Traditional Condiment
<i>Besitos de Coco y Galletitas</i>	Artisanal Coconut cookies
<i>Finca Don Pupa</i>	Fresh Pineapple, Pineapple based hot sauce & marmalade
<i>Kalai</i>	Artisanal Herbal Soaps
<i>Finca La Plata</i>	Fresh Produce
<i>La Finquita de Bebo</i>	Fresh Produce
<i>Kiero Coco</i>	Fresh Coconut & Coconut Water
<i>Apiarios Caraballo</i>	Honey
<i>Apiarios de Borinquen</i>	Honey
<i>Frutas Cortadas y Frappés</i>	Fresh Cut Fruit & Frappés
<i>Árboles Frutales</i>	Fruit Trees
<i>Lavender Innovations</i>	Lavender Plants & Lavender based products
<i>Jardinato</i>	Ornamental Plants

The way FIDA/DAPR assured that grant funds were used solely to benefit specialty crop producers was that, since in the farmers market various ineligible products participated, the sponsorship (matching funds) allotted by FIDA was adjusted to restrict the amount of grant funds used to 50% of the percentage portion of the farmer's market (either space wise or by number of stands) that were occupied by eligible producers. Only local match were used to cover costs related to ineligible products.

GOALS AND OUTCOMES ACHIEVED: Without any doubt, the success that the *Plaza Las Américas* market at the northern part of PR had in the past years, led to expand the market to the *Plaza del Caribe* mall in the southern part of the island. This definitively provided farmers and producers a great opportunity for the direct sales of their agricultural products. Firms that participated in Plaza Las Américas farmer's market during the last grant year reported estimated collective sales in \$1,150,000.00 approximately, compared to \$855,000.00 in sales for year 2012. By the other hand, in *Plaza del Caribe* it was report estimated sales of approximately \$51,800.00. Both reported sales a little bit less than expected regarding our goals and outcomes, but mitigating circumstances always affected the project in some instances. But we felt satisfied with the outcomes achieved, since the vendors resulted definitively benefited from the project, when increased their sales as per their participation in the project.

BENEFICIARIES: Initially when the amendment to grant was submitted and approved, in order to extend the market to *Plaza del Caribe*, only fifteen (15) participants were identified. As of today, sixteen (16) are currently participating. All beneficiaries listed are specialty crop producers (please refer to the list of firms and their products in the table under **Placita @ Plaza Del Caribe Mall in Ponce** in previous page). That is in addition to the thirty four (34) currently participating in the *Plaza Las Américas* market. Please refer to the Project Activities section, to see the list of beneficiaries in both markets at *Plaza Las Américas* Mall in San Juan and *Plaza del Caribe* Mall in Ponce, and a description of their agricultural specialty crop products.

LESSONS LEARNED: Main lesson learned from establishing this farmer market was that the local farmers and producers gain space for the direct sale of their agricultural products. Most important, this opportunity came free of charge and in addition that they were located in the two major shopping malls of Puerto Rico. On lesson learned is that, in case of the recently opened Plaza del Caribe mall, we need to advertise it more effectively so more farmers request participation. Also, we will need to renegotiate the space provided so we could have more space to expand the farmers market. Is not that is in a bad location, but the mall space provided is smaller than the one provided at *Plaza Las Américas* in San Juan, limiting us the amount of participants and the persons visiting the market.

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ADDITIONAL INFORMATION:



SUB GRANTEE'S PROJECTS

State Agency FIDA included, as part of proposed work plan, the approval and subsequent administration of sub grants developed by partner entities solely to enhance the competitiveness of specialty crops produced in PR. A work plan for collective aspects was implemented, and sub grantee projects were allotted funds that were expected to be used during the grant period. (The only sub grantees informed in this report are the ones who completed its project recently. Other sub grantees projects that were completed and/or were not executed (due to many reasons) were previously informed in 2nd annual report.

In the next pages you will find the report regarding each sub grantee project funded during this 2011 SCBGP

SUB GRANTEE PROJECT (1)

PROJECT TITLE: Capacity Building Course to Train Coffee Evaluators to Qualify for SCAA (Specialty Coffee Association of America) Q-Grader Program Certification

PARTNER ORGANIZATION: Offecay, Inc.

PROJECT SUMMARY: The project contributed to a more extended project, related to enhancing the marketing for specialty coffee produced in PR. As such it was built upon work that already been started under previous years SCBGP's efforts, through participation in international coffee trade shows; presentations in several coffee brands to an educated group of evaluators and purchasers; previous training of coffee evaluators according to SCAA's standards, and to work done by the Agricultural Experimental Station toward development a special coffee market segment. The proponent presented a capacity building project using the SCAA Q-Grader 6 day program, which included sensory skills; roasting skills; coffee evaluation, and coffee brewing principles. The course included three components: Instruction, Laboratory and Certification Exam. At the end of the six courses, the trainees who became qualified were certified as Q-Graders and were awarded the Q-Grader Certificate. This contributed to establish quality standards for this market. The instructor proponent of this course was certified by the Specialty Coffee Association of America and was qualified to transfer on his knowledge to the group of potential evaluators. The course introduced students to the special coffee industry, and learned all concepts related to specialty coffee as an academic and practical discipline, when receiving education on the theoretical framework and practical experience. Upon achieving proficiency on each of the areas covered, the attendees were recognized for their capacity in the areas covered in each of the courses. Participants who passed all the examinations and demonstrated the knowledge required, received a certification as Coffee Evaluators.

PROJECT PURPOSE: The specific need or issue addressed with this project was the need on train capable (by world coffee trade standards) coffee evaluators in PR, who could direct an effort toward quality production that enhanced the marketability of Puerto Rican coffee internationally on a quality basis. Quality evaluators must calibrate their quality criteria evaluations to international levels. The greater need to which the project contributed was the major project to develop PR's special coffee production segment into a respectable player in the international special coffee market. Previous efforts related to coffee under SCBGP have focused on obtaining third party evaluations of samples (outside of PR) of coffee considered of good quality; on participating in international coffee marketing events; of celebrating quality coffee in PR, and on training a group of evaluators under the standards of Quality Coffee of the Specialty Coffee Association of America (SCAA).

This effort qualified evaluators under the world recognized standards (SCAA) and prepared them to address the particular requirements of the world coffee market. There existed also an effort to develop the organic coffee niche, by training groups of coffee producers in organic techniques and concepts. The special coffee (superior quality) market is a niche market that pays a premium price for the product and exists mainly in the more developed countries, some countries in Europe and USA. PR has established a presence in world coffee markets through its presence in world fairs and in coffee fairs.

Quality, none-the-less, is many times questionable because producers tend to make claims they cannot sustain in the terms of third party evaluation. There are also many considerations to be held in mind during the production process to achieve quality. There was a need for coffee evaluators with credibility who could provide a reliable judgment to producers on their achievements. Producers also benefit from the training because they could later apply the lessons learned to their own production process and because they could evaluate their own coffee quality in a trained and knowledgeable manner.

PROJECT APPROACH: The first course offered was celebrated during January 10-12, and 17-19, 2014: Capacity Building to Train Coffee Evaluators to Qualify for SCAA (Specialty Coffee Association of America) Q-Grader Program Certification. This course has the objective to measure Proficiency and the Q-Grader Certification. In this training, there were eight (8) participants, from which 4 obtained the Q-Grader certification. During the course offered on 6 days in April 2014, 6 were the participants. It was not informed if same obtained the certification. Finally, during the courses offered on May 23-25; 30-31 and June 1, 2014, 8 participants benefited from the courses. From them, only two obtained the certification (representing a 25%).

GOALS AND OUTCOMES ACHIEVED: The target in this project was to impact and benefit at least 20 participants, which 20% (or 4) should obtain the Q-Grader certification. At the end, 22 participants were trained, and a total of 6 obtained the certification. This represents a 27% of participants obtaining the certification.

BENEFICIARIES: The primary targeted potential beneficiaries of the project were producers and processors of special coffee in PR. The target was at least twenty (20) participants, but at the end twenty two (22) took the courses.

LESSONS LEARNED: The initial proposed project was to offer the course leading to the SCAE CDS certification. Nevertheless, proponent confronted some problems (that delayed the project) regarding changes in the rules for instructors. Due to the mention reason, the proponent requested a change in his project, in order to offer the course Q Grading in PR for the coffee producers under the CQI. The benefit was that the Q Grader certification was an older but a more renown certificate than the SCAE CDS; CQI objective was to help producers improve their coffee products, and this was more in line with PR producers objectives; CQI program was mature and supported by a wide range of professionals worldwide, and finally that the CQI materials were based in more solid scientific knowledge.

At the end, they met the goal of achieving that more than the expected 20% obtained the certification, which indicated that the change requested starting the project was beneficial.

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SUB GRANTEE PROJECT (2)

PROJECT TITLE: Fresh Picked Packing and Processing Plant

PARTNER ORGANIZATION: La Tierra Prometida, Inc.

PROJECT SUMMARY: *La Tierra Prometida* has a program which aims to provide recovery opportunities to homeless participants by assisting them in restructuring their life, through skills developed during their stay. These include training in occupational skills and competence, preparation for employment and actual placement in the job force. Part of this efforts focuses on specialty crop production, using existing on site greenhouse facilities and marketing. *La Tierra Prometida* was in process of developing organic agriculture projects where participants were trained in organic production, hydroponics production, organic nutrient and pesticide preparation, among other skills. They had registered the brand Fresh Picked to distribute the organization's specialty crop products, as well as those produced by the other local farmers. Targets of the sales and distribution efforts were restaurants, hotels and supermarkets. The proposed project should contribute to the establishment of a processing and packaging area for the mentioned products. The funds were requested to train participants in best practices and to prepare a specialty crop packing area that conformed the FDA and local agencies regulations.

PROJECT PURPOSE: The project had three purposes and objectives directed to serving the farm workers, small entrepreneurs and the alimentary quality of the community. The farm workers should be trained in facets that were different from planting and harvesting products. They were trained in the specialized cultivation of mixed herbs for high cuisine and the variation of these for the local market. This included the modality of organic agriculture and nutrient preparation. The small entrepreneurs, through a collaborative agreement prior established, has a guaranteed sale for their products. In addition, they were allowed to use the packing plant and were offered training conforming to the specifications of FDA and local agencies. Finally, the community alimentary quality guaranteed a permit to for traditional and no traditional herbs and vegetables to arrive at the market with more freshness and quality. They were offered educational talks about nutritional value of the products through informative activities. Through the achievement of these objectives, the cost of the process and packaging was supposed to be lower than other non-local sources. It also could provide an opportunity for the small and medium farmer to access a service in exchange for a minimum amount. The marketing and advertising methods were supposed to be tied to the organization and to be a positively reflected cost wise for those ascribed to the project.

PROJECT APPROACH: The activities were directed exclusively to specialty crop eligible products, providing space of the building dedicated to the packing area for specialty crop products, and by producing only eligible products on the facility's greenhouse areas. In addition by packaging only eligible products in the packing area to be develop. During the second year of the grant period, *La Tierra Prometida* performed a series of activities, which were within the purposes of the project and their work plan. A total of eight (8) training sessions were held related to GAP, GMP and Food Safety, and/or in topics such as: Organic Farming Process/System (2); Marketing (1); Coffee and cacao Farming (1); Organic Pest Control (1); Compost process (1); Tropical horticulture (1); Food Safety Handling (1).

They provided training to the targeted groups and monitor them after the trainings in facets such as organic farming agriculture process; organic pest control and compost process; marketing; coffee and cacao farming; provided training to participants and other persons from the community in best agricultural and produce handling practices, in food safety; in agricultural practices, and in manufacturing practices. They also helped in the improvement of the conditions of small farmers, expanding the services of the farmers market. Nevertheless, proponent confronted several problems that did not allowed them to complete the project, and not perform any other activities during this last grant period year. The packaging phase was not performed (please refer to Lessons Learned section).

GOALS AND OUTCOMES ACHIEVED: Proponent performed some activities during the first two years of the grant, as described in the Project Activities section. Participants of the project were trained in Good Agricultural Practices (GAP), in areas such as germination, sowing and crops. Also, they received training in Good Manufacturing Practices (GMP) for the processing and packaging services to produce from additional local firms/farms. During last grant period year, they provided training to approximately 82 participants and other persons from the community in best agricultural and produce handling practices: Food Safety, Agricultural Practices, and in Manufacturing Practices. The participants were small community farmers, small producers and homeless participants of agricultural activities. Most of them have been monitored after the trainings. As a result of their educational activities performed during the first two years of the grant period, they reported that sales of farmers increased in almost 50% between January through June, 2013. In addition, that the expected outcomes, regarding increasing and fortifying the small organic & natural farmer, were achieved. The project also maintained the training processes to the participants of *La Tierra Prometida*, Inc. (which were homeless people living in a transitory home), enabled trainees to compete effectively in the labor market, and with the capacity to establish their own business. They reported that, from all participants, fourteen (14) participants have been graduated, and that twelve (12) of them achieved permanent homes and were working in the agricultural and food industry. Those employment opportunities were thanks to their technical assistance when trained them in agricultural areas and other related processes. Finally, they reported that they assisted in the preparation of other farms regarding obtain the organic certification. Nevertheless, did not achieve all the goals and outcomes proposed related to provide processing and packaging services, and purchasing agreements to be reached and signed. Please refer to Lessons Learned section for details

BENEFICIARIES: During the first two years, the project benefitted more than 30 during the 2012 grant period and 52 in the 2013 grant period. The participants were small community farmers; small producers and homeless participants of agricultural activities

LESSONS LEARNED: The organization (and the project) was affected by determinations (reductions) regarding funds; by the change in government and the transition period (that led to a reduction in employees). These all issues affected their processes of modifications when obtaining use of permits and licenses for the manufacture. For this main reason, the proponent could never provide the processing and packaging services to producers from the other additional farms, including complete purchasing agreements to be reached and signed.

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SUB GRANTEE PROJECT (3)

PROJECT TITLE: Proposal to Establish a Queen Bee Rearing Apiary in Toa Alta, PR

PARTNER ORGANIZATION: Núcleo de Apicultores de PR (NAPRI)

PROJECT SUMMARY: NAPRI is a beekeepers organization that requested funding for initial establishment of a queen bee production for the benefit of twelve (12) NAPRI members and other independent beekeepers, so that quality of queens available to producers could be upgraded. The project should benefited participants by providing quality of queens, allowing for both increasing yields and fertility of various island crop products due to pollination made by bees, and by selling honey and other bee by-products for additional income. The program of queen rearing should greatly improve the quality of honeybees, to produce more food and honey. Once established and in production, the proponent NAPRI should provide all twelve (12) members free queen bees for each of their hives. After the original free distribution, NAPRI should offered additional queens to members who wished to develop additional beehives at moderate prices. Other beekeepers out of NAPRI were expected to be able to purchase queens from NAPRI at very fair prices. The project included a structure to be built; equipment for beekeeping and labor for construction and reforestation of the farm.

PROJECT PURPOSE: The initial plan was to establish one (1) queen rearing apiary to produce quality queens for the members. The apiary should consist of twenty (20) colonies and the configuration of a colony would have two (2) full hive bodies with ten (10) frames and sheets of wire wax foundation in each hive as broad chambers; and one (1) full hive bodies with ten (10) frames and sheets of wire wax foundation for honey storage and one shallow supers with six (6) cell bar frames for queen rearing. The bees would be strictly organic producers. Member's apiaries should re queen and reforest the surrounding area of the apiary to increase the melliferous zone sources of nectar. Fostering the beekeeping industry was justified for various reasons: there was an abundance of nectar flowers sufficient to expand the production by more than three fold. The potentialities of the local market should be developed if proper marketing system was implemented. The project was intended to increase the marketable honey, breed queen bees and other bee by-products per existing colony by two to three times. Also, to provide economic opportunities to many local families interested in beekeeping and organic farming.

PROJECT APPROACH: Activities proposed in the project were directed for the initial establishment of a queen bee production, for the benefit of the 12 NAPRI members and independent beekeepers, so that quality queens available to producers could be upgraded. Since the activities reported in the 2nd annual report, this sub grantee was supposed to complete reforestation phase, which included reforest the surrounding area of the apiary to increase the melliferous zone sources of nectar; to obtain a list of bee keepers, and provide them with the queens and complete the project. Nevertheless, proponent confronted a series of problems resulting in not completing its project. Reforestation process was not completed, same was started but not with melliferous trees and bushes, citrus and medicinal trees, as proposed.

As per informed by the proponent, the project commenced 6 months out of the cycle of the season. But later the good weather allowed them attending and managing the beehives in their location. This helped the proponent to obtain solid information about the approximate average of honey produced yearly by the beehives. The aforementioned behavior helped the proponent to gain lost time, according the work plan submitted since all activities programed had to coincide with the bees rearing season. Luckily, as informed, none of the hives were affected due to sickness or disease. During October through December 2013, the proponent confronted problems due to heavy rain occasioning swarming and the sprayer of chemicals to combat the mosquito *aedes aegypti* contributed to the loss of full beehives and downsized the population of their beehives. As a consequence, they had to replace some lost colonies with new queens and bees. The bad weather affected the labor of the bees in the field collecting water and nectar, and inside of the beehive in the process of mixing the water and the nectar, decreasing the production.

GOALS AND OUTCOMES ACHIEVED: Proponent did not achieve all the goals and outcomes. Therefore, proponent NAPRI was funded only for those executed and informed activities in previous reporting period. Same were regarding purchase of some apiculture materials, in addition to some reforestation process. NAPRI confronted several difficulties that affected the continuation of the project. As per informed by the proponent, the overall accomplishment of the project was:

- 40% accomplishment of the work related with the list of apiculture managed by the Department of Agriculture and with the list provided by NAPRI. The reason not to be completed was that the proponent stated that he could not obtain the list of the apiculturists.
- 40% of the queen rearing process due to the delay with the beginning of the project. Due to the delay in the commencement of the referenced project, the queen rearing process was altered on several occasions; and by this the beginning of this process will be during March 2015, with results expected on May 2015.
- The purchase of beekeeping materials, uniforms, tools and equipment was done by 90%. They informed savings when obtaining materials of good quality at lowest prices, with the intention of making economies that could reinforce the same item in the budget or any other item and never occurred.
- Preparation of the site for the apiary and the construction of beehives stands at the apiary was done by 90%.
- Installation of bee traps in the surrounding area of the apiary was completed in an 80%.
- Reforestation with melliferous trees and bushes was done by 80%.
- Sowing small areas of 25"by 25"with citric, plantains, bananas, coconut palms and a variety of fruits was done by 35%.
- Maintaining the area of the apiary following recommendations of the Department of Natural Resource and environment was done by 85%.
- Assembly of hives, frames, tops, bottoms, inner covers, feeders after the arrival of the uniforms, tools, equipment and all materials, was done by 95%.
- The remaining 29% of the project is expected to be done by February-March 2015, and with results on May 2015.

BENEFICIARIES: Since proponent could not obtain the list of beekeepers to complete the project, there were no direct beneficiaries. Nevertheless, it is expected that at least 30 beekeepers will be benefiting once the project is finalized.

LESSONS LEARNED: Proponent confronted delays and alterations in their time schedule, reason why they have not completed the project; confronted problems to obtaining the list of independent beekeepers; plus the bad weather during the first months of last grant period, contributed to a loss of full beehives resulting in downsizing the population. All these circumstances affected its project to be completed, as the proponent informed. Without the list, many other potential beekeepers were left out from participating in the feasibility study. Recommendations were submitted by the proponent: in order to participate and obtain positive results that could be shared on behalf of the project and other beekeepers, NAPRI request is that DAPR could assign personnel sufficiently knowledgeable about apiculture, bees and beekeepers needs. They understand that this sector needs support in developing the beekeeping industry in PR.

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ADDITIONAL INFORMATION:



SUB GRANTEE PROJECT (4)

PROJECT TITLE: *Educational Program in Home Gardening and in Agro Entrepreneurial Hydroponics Crops*

PARTNER ORGANIZATION: *Hidrocultivos Carolinenses, Inc.*

PROJECT SUMMARY: The project was directed to pre scholar children, specifically in day care centers. The purpose was to provide them with basic skills and knowledge in how to create, maintain and conserve a home garden. They educated them and created the base for the development of an adequate nutrition for a better quality of life, and therefore contributed to the food security, among others. Through this project they have impacted children, youth, adults and seniors in care of substitute homes, schools and community centers in general. Through providing them with the training of the necessary skills, they were able to achieve self-sufficiency in agricultural market, specifically in the area of crops Agro hydroponics business focused on the good agricultural practices. The project was timely since it was an educational project that impacted various ages and demographic groups, and since it focused on food security and the importance of maintaining adequate nutrition which is a current worldwide concern.

PROJECT PURPOSE: The purpose of our project has been aimed at the implementation of an educational program through home-made garden workshops and hydroponics agribusiness. They focused specifically on the awareness of food security through good agricultural practices in our country and the importance of maintaining adequate nutrition. The purpose of the project was to arouse interest in practice hydroponic alternatively in the agricultural practice, for future agro businessmen resulting in:

- an excellent growth in the demand for the services of arising new partnerships workshops
- requests for new partners in the agribusiness industry / purchase - sale of harvest agreements
- New Advisory agreements to new farmers in Puerto Rico and abroad

As expressed by the sub grantee, the opportunity to receive SCBGP funds for this project allowed them to bring this dream to reality, and opened them and others the doors to what will soon be the new facilities of an agribusiness incubator in Carolina, Puerto Rico on a campus of more than 185-acres.

PROJECT APPROACH: The proponent *Hidrocultivos Carolinenses, Inc.* specializes in the following specialty crops, leading its project to benefit only eligible specialty crops by focusing the educational workshops in those crops: romaine, *tropicana* and red lettuce; *cilantrillo*, basil, carrots, *morron* peppers of different colors, and lemons. Workshops/capacity building for pre-school children, residents of substitute homes and elderly centers were promoted and marketed through presentation cards, t shirts, caps, social network, and email, among others. In addition, a data base with prospects for the training sessions was created. We also attended and assisted students in their hydroponic projects at scientific fairs. Activities to increase volume in packing and distribution center products were also performed. As per recommended agricultural practices, crops from farmers were sold.

Through the workshops, the children were involved in agriculture from their childhood as a base of their future, impacting areas such as: food security; home garden management; increasing the quality of life through improved nutrition; financial and entrepreneurial aspects. Elderly persons were exposed to innovative agricultural experiences. We developed among both populations the interest in home gardens. A hydroponics network was created online (www.verdees.com) to maintain continuity of the services with participants and between them. It served also to follow up, data gathering and evaluation.

GOALS AND OUTCOMES ACHIEVED: During the grant period, many activities were performed by the proponent. All of them led to increase gardening skills of pre-school children and their families through attendance at gardening workshops. A summary of specific activities performed and reported by the sub grantee during the grant period is as follows:

- Training sessions' promotion: promotion was through presentation cards, t shirts, caps, social network, and email, among others.
- Training session: *Huerto Hidropónico Casero* (Hydroponic Home Garden): 6 youths participated and completed this training session for a whole month, under the ADT summer program (from the Department of Labor).
- Summer camp from *Iglesia Samaria Cacao-Carolina* (Samaria Cacao Church at Carolina, PR): 20 children participated on a home garden.
- Construction and improvement of demonstrative facilities; preparation of demonstrative greenhouse and planting/sowing modules; germination of demonstrative plants and irrigation, for the training session.
- Promotion and marketing of the workshops: the workshops were promoted and marketed; nevertheless, some were not able to be offered due to the problems with the road access during the second year.
- A data base was created, which includes the names of prospected participants. During the agricultural fairs we established direct contact with other prospects. A total of 104 prospected participants had been contacted.
- Scientific fairs: attended and assisted 3 students in their hydroponic projects; two of them achieving a second place. The students worked on their projects in the commercial nursery area, instead of in the demonstrative nursery area due to the fact of the landslide that occurred there.
- Activities to increase volume in packing and distribution center products were performed. The goal of packing agricultural products was achieved: five (5) new farmers are currently supplying their crops, to complete the distribution. They had not taken the workshops due to the mentioned reason; nevertheless, they received technical assistance in order to comply with good agricultural practices and quality standards.

Over \$5,890 of the crops from the farmers were sold, as per recommended agricultural practices.

Finally, the following table summarizes some of the goals and outcomes achieved regarding the workshops promoted, marketed and celebrated for children, residents and elderly, plus amount of beneficiaries from the project during last years' grant period:

Activities	Media	Achievement	Conclusions
Workshop in Home Garden and Hydroponic Cultivation through the internet-presentation in collaboration with the University of PR Agricultural Extension Service/workshop Home Garden and Hydroponic Cultivation	Internet www.upr.edu	More than 2,000 people have benefited from the information posted	Increase in agricultural practices and agribusiness development 2011-2014
Promotion of workshop in Home Garden and Hydroponic Cultivation	Internet www.verdees.com	About 1,000 people made search	2011*2014
Workshop in Home Garden and Hydroponic Cultivation	Demonstrative nursery in the farm and the community	More than 250 people trained	2011-2014 Achieved more than 100% among persons trained on the estate and via internet
Distribution and Packing Centre		Achieved to satisfy the demand for more than 20 products from <i>recao</i> , lettuce, cilantro, basil, peppers, tomatoes, peppers, among others harvested in different farms in Puerto Rico for distribution to commercial level.	We comply with the goal of offering a source of direct revenue. Sales of these products exceeds \$100,000 2011-2014

The potential economic impact of the project exceeds the \$200,000, as a result of this effort. They have been able to lay the groundwork for the new development of agribusinesses and directed in the agribusiness incubator, which will give continuity to this project.

BENEFICIARIES: The following table summarizes the specialty crop stakeholders/groups that benefited from the completion of the project's objectives:

University of PR-Mayagüez Campus College of Agricultural Sciences Agricultural Extension Service		Workshop in Home Garden and Hydroponic Cultivation through the internet-presentation in collaboration with the University of PR Agricultural Extension Service/workshop Home Garden and Hydroponic Cultivation
Practicing Students	(3) students	(2) agronomists; (1) agronomist in the agricultural statistics area
General Public – hydroponic information page	(1,000) persons	They have created their home and hydroponic garden
General Community workshop	(100) persons	They have created their home and hydroponic garden
Elementary school students-workshop	(25) students	They learned to make their garden in groups
Adults between 20 to 65 years-workshop	(75) adults	12 are agro businessmen, and others have their own home gardens
High school students-workshop	(50) students	They learned to make their garden in groups
Scientific fairs-workshops to students from elementary schools	(5)	(1) 3 of the 5 won first and second place; one of them said that he will be agronomist when adult

LESSONS LEARNED: They were several the challenges and adversities that were confronted, from the inclemency of the weather, landslides, rain, and others. In the workshops we have young people that were not so interested in the agriculture, and they simulated they planted plants and not performed the planting process well as taught. Nevertheless, at the end of the workshop, they caught so much passion for the agriculture that they would with the desire to keep working on the farm. As of today, they are now in the process of being certified as a bona fide farmer. They demonstrated and confirmed that anywhere a home garden can be provided when there is passion for the agriculture; the care that requires and the respect for the environment. They learned to respect the spaces and to value more what we have, knowing that there are people who have no place where to plant something. Therefore, they work at the community level.

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ADDITIONAL INFORMATION:



SUB GRANTEE PROJECT (5)

PARTNER ORGANIZATION: *Organización Boricúa de Agricultura Eco-orgánica, Inc.*

PROJECT TITLE: *Portal Cibernético Agroecológico: An online space for promoting organic and agro ecological farming in Puerto Rico*

PROJECT SUMMARY: *Portal Cibernético Agroecológico (PCA)* was an educational project by the Puerto Rico based non-profit *Organización Boricúa de Agricultura Eco-orgánica, Inc.* that promotes the competitiveness of local organic and ecological farmers through a series of 12 short videos. The videos showed 12 beginner and experienced farmers, their agricultural practices and their crops. The videos were presented locally at different community settings. The series were also available at a website with additional information about the farmers and their produce. The impact of the project was assessed throughout the development of the PCA measuring its impact on farmers and consumption. The project was important and timely since there was an increased awareness of the importance of developing local and sustainable agriculture, and same provided a vehicle to increase visibility and knowledge of organic and agro ecological specialty produce in PR.

PROJECT PURPOSE: The *Portal Cibernético Agroecológico (PCA)* aims to foster: 1) the exchange of information between experienced and beginner farmers on crop improvement methods, 2) an increased public awareness and consumption of locally grown specialty organic and agro-ecological crops, and 3) additional means for marketing local organic specialty produce.

PROJECT APPROACH: This educational project's focus was to promote the competitiveness of eligible local specialty crop organic and ecological farmers, through a series of promotional documentary videos. A total of 11 videos were filmed in the first year (2012-2013) of the project and one video was filmed last September of 2014. The project website was designed and uploaded by the end of 2012. Ten videos have been released and are available at the website (www.agroecologiapr.org) and two are ready for release. Six videos already have English Subtitles. Each video features a different practice in ecological farming as well as the specific products available from each farm. At this moment the sum of views of the ten released videos is 100,596. At the end of the project, staff should organized public school and civic organization presentations. The participating farms and production dates were as follows:

Farm/Town	Production Date	Total Production Days (1)	Status
<i>Josco Bravo/Toa Alta</i>	<i>July 20, 2012</i>	<i>4</i>	<i>Done</i>
<i>El Paraíso/Arecibo</i>	<i>August 8, 2012</i>	<i>2</i>	<i>Done</i>
<i>Productos Montemar/Aguadilla</i>	<i>August 17, 2012</i>	<i>3</i>	<i>Done</i>
<i>El Guajonal/Yabucoa</i>	<i>September 13, 2012</i>	<i>6</i>	<i>Done</i>
<i>Siembra Tres Vidas/Aibonito</i>	<i>November 9, 2012</i>	<i>3</i>	<i>Done</i>
<i>Mi Casa/Camuy</i>	<i>November 14, 2012</i>	<i>2</i>	<i>Done</i>
<i>La Tierra Prometida/Aguadilla</i>	<i>November 25, 2012</i>	<i>2</i>	<i>Done</i>
<i>Hacienda Jeanmarie/Aguada</i>	<i>February 25, 2013</i>	<i>2</i>	<i>Done</i>
<i>Gripñas/Jayuya</i>	<i>March 11, 2013</i>	<i>3</i>	<i>Done</i>
<i>Bikai/Camuy</i>	<i>April 2, 2013</i>	<i>3</i>	<i>Done*</i>
<i>Escuela Botijas 1/Orocovis</i>	<i>April 10, 2013</i>	<i>3</i>	<i>Done</i>
<i>Siembra para Todos/Utuado</i>	<i>September 28, 2014</i>	<i>1</i>	<i>Done*</i>

**These videos are not available yet at website. Artwork and web development are ready for next releases.*

(1) Most videos required additional filming days to those in the original proposal

GOALS AND OUTCOMES ACHIEVED: Internet video views exceeded our expectations. Thanks to an aggressive social network promotion, the videos transcended and communicated across borders. The main 5 countries where the videos were viewed included: Puerto Rico (40%), United States of America (30%), Mexico (9%), Colombia (6%), Spain (5%), Others (10%). The total video views are 100,596 as to the date of November 20, 2014.

Video Views *

- Finca El Paraíso 10,458
- La Tierra Prometida 13,730
- Siembra Tres Vidas 7,780
- El Josco Bravo 7,950
- Productos Montemar 6,820
- Finca Mi Casa 17,792
- Hacienda Jeanmarie 8,820
- Escuela Botijas 1 11,015
- Finca El Guajonal 11,405
- Finca Gripiñas 5,039

*Total Views: 100,596

From August 2012 to November 2014, the web site www.agroecologiapr.org had 16,277 unique visitors, 24,667 web site visits and 57,911 web page hits. The discrepancy in numbers between video views and web site visits is due to videos having been published and shared independently on the youtube.com website. The final contract to complete this project was signed last September 2014, days before the end of grant period. So, there was no time left for results analysis, to gather and achieve 400 new email contacts, and to performed public school & civic organization presentations.

BENEFICIARIES: This project would have benefited from a thorough evaluation process. Nevertheless, from informal analysis of benefits to participants of the project, it was observed that farmers profited positively from the publicity. The individual farmers who participated in the videos expressed gratitude and eagerness to participate in future projects of educational videos. Ian Pagán, from the *Josco Bravo* Farm, considers this educational project as one of the most significant endeavors to display ecological and organic agriculture in Puerto Rico. According to Ian, the videos mark a pivotal moment for the organic farming movement. Another participant, Daniella Rodriguez of *Siembra Tres Vidas*, told us that after the video was posted, she received numerous calls admiring her work, along with visitors to her farm from people in the community. In addition, viewer comments from all over the world were very complimentary, and conveyed that the videos were both educational and most inspiring.

Farmers Markets also benefited from the “free” publicity because now consumers could have “virtual visits”, through the videos, to the farms they buy from, and learn the techniques farmers use to grow their food.

At the end, at least 11 specialty crop farmers benefited directly from the project, where their farms production activities were filmed. In addition, the total video views or persons which accessed the website were 100,596 (as to the date of November 20, 2014), benefiting also from the project. We could conclude that the beneficiaries affected by the implementation of this project, could expect a great potential impact in their respective specialty crop productions.

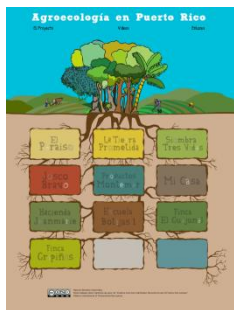
LESSONS LEARNED: The main challenge this project has encountered was to complete production of the videos in one day as originally proposed. To capture the visual details of the farm processes, product harvest and farmers market, more production days were added for each video. The focus of the videos was to show farm work rather than on interviewing farmers, which requires more time for the crew than anticipated. Another challenge was that after the first year of the project, the contract renewing process between the *Organizacion Boricuá* and the Department of Agriculture or Puerto Rico took 16 months due to internal problems of the NGO. This halted the production of the last video, which was finally filmed at the end of the grant period. The final contract to complete this project was signed last September 2014, days before the end of grant period. So, there was no time left for results analysis, to gather and achieve 400 new email contacts, and to performed public school & civic organization presentations.

From the feedback and the informal analysis it is evident that there is a pressing need for more agriculture educational videos in Puerto Rico. Using the Internet as a platform for dissemination of agriculture information is a must for any future or present video project. USDA and PRDA should consider establishing a long-term educational video project to encourage young and adult farmers.

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ADDITIONAL INFORMATION:

Attached in the following pages you will find pictures and video information regarding the project.



Website design by Ascender Design Group- www.agroecologiapr.org Art by Juan Manuel Pagán Teitelbaum



Video website sample page for El Paraíso Farm in Utuado. http://agroecologiapr.org/el_paraíso.htm



Production of Josco Bravo on July 20th, 2012. From left to right: Mariolga Reyes – Producer, Benjamín Curet – Sound, Juan Pagán –Director, Leandro Fabrizi – Director of Photography and Ian Pagán – farmer.

STATE MANAGED PROJECT (5)

PROJECT TITLE: CASA SOMBRA (HOUSE SHADE) (Project approved through grant amendment)

PARTNER ORGANIZATION: FIDA

PROJECT SUMMARY: The original project (funded by prior grant) was directed to establish structures known as House Shades, same to achieve commercial outputs. This kind of structures are very effective in avoid plagues that could affect the crops. Also they helped crops in other countries so could be sowed during rain seasons, which could be effective in the southern part of PR were the rain periods have extended more than the normal patterns. Through the installation of this kind of structure, we could validate the use of those structures through empirical data and research. The results of the investigation should be disseminated in benefit of other specialty crop farmers and/or producers. The structures, once proved to be effective, could also be used by other specialty crop farmers to cultivate other crops. The structures should also help in produce high quality fruits, as well as to avoid the damage that causes the plague *Plutella xylostella*.

PROJECT PURPOSE: The vegetable producers from the southern area of PR had to reduce their plans of sowing due to a more extended rain season. By the other hand, the high incidence of diseases and plagues has caused reductions in the yield of cabbage. For both reasons specifically, the PR market, as well as outside, presented and displayed greater sale prices of the horticulture crops by shortage. The Department of Agriculture of PR promoted an investigation using the shade house technology, when establishing through the project the first two units of house shades. The first investigations were directed to the crops of cabbage and watermelon. The UPR should extend the project to continue develop investigation regarding other crops. In addition, they should be evaluating new varieties that respond to this technology. This initiative should also promote the development of new specialized agricultural technicians in crops under these structures.

PROJECT APPROACH: Under this phase of the project, funds were requested through an amendment in order to install the structures. The funds were strictly used in materials for the installation; to pay a Land Surveyor; manpower expenses; machinery to level and drill the land, and finally for the Supervisor of the project. We took the initiative to visit projects established in Santo Domingo, because they had similar structures of those we are establishing in Puerto Rico with the initiative approved. (Please refer to Photo 1, Additional Information section). The installation required that the manpower had the expertise to establish the project. The process of getting quotes for the installation of Project House Shades was slow. Participants who submitted proposed facilities, at the end declined by the complexity of the project.

The depth limit that the holes in the ground supposed to be specifically for the turnbuckles must be 4.5 feet deep and setting in the background elephant's foot. (Please refer to Photo 2 in Additional Information Section). Therefore the installation phase of the tubes with the staff of the Land Authority of Puerto Rico was performed. They were changing the bit to achieve the desired depth and developed the technique to the elephant foot (Please refer to Diagram 1 in Additional Information section).

The supplier performed the installation of the unit understanding that by not using it, it could influence the availability of the planes. The developers then supervise the first phase of installation of the unit (Please refer to Photo 3 in the Additional Information section).

With the structures it was expected to investigate the performance (efficiency and adequacy) related to seed local and new crops in PR, and to improve the knowledge among other farmers of the proper handling of crops like: cabbage, watermelon, papaya, cooking and moron peppers crops. Orientations from DAPR agronomists are expected to be initially offered to at least 54 cabbage farmers and 45 other local specialty crop growers, in areas such as GPA and other agricultural practices under the use of this kind of structures. The results should be disseminated in the Journal of Agriculture of PR, and through the Agricultural Extension Service Program, within the Agricultural Experimental Station.

GOALS AND OUTCOMES ACHIEVED: Efforts to find new tools that contribute to the agricultural sector of vegetables and especially to increase the production of cabbage and other crops were favored by project approval shade house. The goals in this phase were inherent to occur as primarily established. Our first goals were to gain the knowledge in order to guide the farmers in the selection of equipment and supplier. We also guided to the correct and safe investment for business success and agricultural production. We were ready to guide our professionals of agriculture in the process of establishment and installation of the unit.. Experiment Station Directors were very satisfied that the results will be highly beneficial for the agricultural sector of vegetables. They were very motivated and ready to perform the research.

The commitment of this educational agency is completely solid in the development of research. Cabbage farmers and producers in southern Puerto Rico area are currently following up the project. They have made visits to the project and are sure that the production technique shade house will be validated by the Experimental Station. They are waiting for study to go and watch the crops that were sowed. In addition, the approval by the Department of Agriculture is required to subsidize the acquisition of additional structures through the Agricultural Investment Program. The number of suppliers interested in offering this technology has increased and are awaiting validation project for its offer to farmers.

With the structures it was expected to investigate the performance (efficiency and adequacy) related to seed local and new crops in PR, and to improve the knowledge among other farmers of the proper handling of crops like: cabbage, watermelon, papaya, cooking and moron peppers crops. The results should be disseminated in the Journal of Agriculture of PR, and through the Agricultural Extension Service Program, within the Agricultural Experimental Station. Since the installation process of the structures was delayed (due to problems confronted), the goals and outcomes; in addition to the dissemination of results, will be achieved and seen in a long term period.

BENEFICIARIES: The main beneficiaries of this project were mainly producers of vegetables, cabbage and in the near future other crops. At least 54 cabbage farmers, and additional 45 local other specialty crop growers, should be initially benefited from this project. With the dissemination of results through the Journal of Agriculture of PR, and through the Agricultural Extension Program, more local specialty crops are expected to be benefited from the project.

LESSONS LEARNED: We are confident that the project will control the diamondback moth pest (*Plutella xylostella*), which will contribute to the confidence of the farmer to replant cabbage. This novel technique has been good to Puerto Rico, because there is no other project of this magnitude. Being a new production technique, we found that we had left out some objectives and goals factors contributing to the fully success of the initiative. But we are pretty sure and convinced that the results of this initiative will be of high beneficial for our agriculture. Farmers may again make cabbage crops where you get excellent performance. Also you can set other crops where it is not season cabbage. The impact of the initiative is reflected in the increase in Gross Agricultural Joined the vegetable sector in general of our Puerto Rican agriculture.

By the other hand, we could point out the weaknesses that must be corrected in the process of assembling the structure of house shades. We were affected by some mitigating circumstances that delayed the project. The structures were ordered, but the supplier did not ship them timely. The delay in receiving the structures leaded, for obvious reasons, to a delay in their installation. In addition, we required additional funds in order to obtain materials needed for the installation; purchase of the seeds; sowing and investigation phase and the final dissemination of the project results. Regarding technical activities, next time when acquiring the structures it will be necessary that the farmers purchase agreement that provides that the unit will include the mounting plane. The plane is necessary, the supplier and its representative in Puerto Rico did not heed this need.

With the structures it still expected to investigate the performance (efficiency and adequacy) related to seed local and new crops in PR, and to improve the knowledge among other farmers of the proper handling of crops like: cabbage, watermelon, papaya, cooking and moron peppers crops. The results should been disseminated in the Journal of Agriculture of PR, and through the Agricultural Extension Service Program, within the Agricultural Experimental Station. Since the installation process of the structures was delayed (due to problems confronted), the goals and outcomes; in addition to the dissemination of results, will be achieved and seen in a long term period.

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ADDITIONAL INFORMATION:



Photo 1



Photo 2



Photo 3

